KTE6000 / KTU6000...CS Series
OEM submersible pressure transducers



FEATURES

- **0...250 to 0...5000 mbar, 0...5 to 0...70 psi gage**
- **For corrosive media**
- **4...20 mA output**
- **Field interchangeable**

MEDIA COMPATIBILITY

Wetted materials:
stainless steel 1.4404 (316L), ceramic Al_2O_3, PVC, PUR, NBR[11]

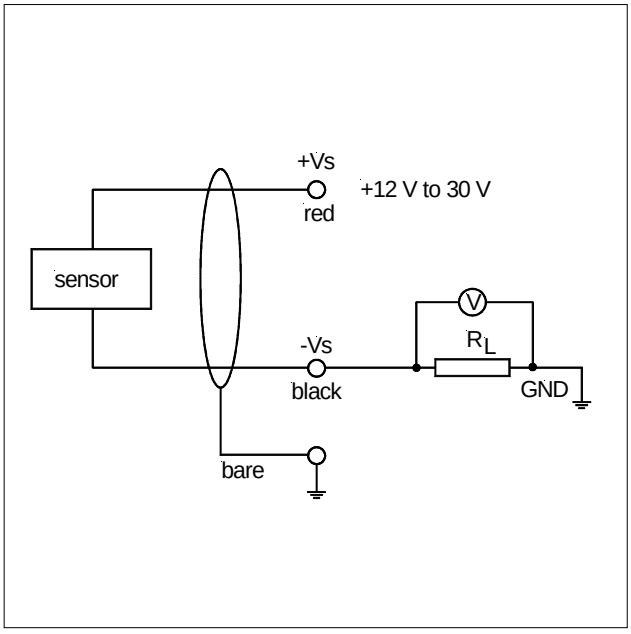
Housing:
protection class IP 68 (according to DIN EN 60529) respectively NEMA 6P[1]

SPECIFICATIONS[9,10]

Maximum ratings

Supply voltage[2] (reverse polarity protection)	12...30 V
Temperature limits	
Storage	-40 to 85°C
Operating	-25 to 85°C
Compensated	0 to 70°C
Vibration (5 to 500 Hz)	10 g_{RMS}
Mechanical shock	50 g
Proof pressure[3]	2 x rated pressure

ELECTRICAL CONNECTION



SENSORTECHNICS

www.sensortechnics.com

PERFORMANCE CHARACTERISTICS

(unless otherwise noted, V_S = 15 V, R_L = 100 Ω, t_{amb} = 25°C)

Characteristics		Min.	Typ.	Max.	Unit
Operating pressure	KTEM6250...	0		250	mbar
	KTEM6400...	0		400	
	KTEM6600...	0		600	
	KTEM61K0...	0		1000	
	KTEM61K6...	0		1600	
	KTEM62K0...	0		2000	
	KTEM65K0...	0		5000	
	KTU6005...	0		5	psi
	KTU6010...	0		10	
	KTU6015...	0		15	
	KTU6020...	0		20	
	KTU6030...	0		30	
	KTU6070...	0		70	
Zero pressure offset		3.8	4.0	4.2	mA
Full scale span[7]		15.8	16.0	16.2	
Thermal effects (0 to 70°C)[4]	Offset (250 mbar/5 psi)		0.04	0.08	%FSO/°C
	Offset (< 1 bar/15 psi)		0.03	0.06	
	Offset (all others)		0.02	0.04	
	Span		0.02	0.04	
Thermal effects (-25 to 0°C, 70 to 85°C)	Offset (<1 bar/15 psi)		0.06		
	Offset (all others)		0.03		
	Span		0.03		
Non-linearity, hysteresis (BSL) and repeatability[5]			±0.1	±0.3	%FSO
Output noise (0 < f < 1 kHz)			±0.04		
Long term stability[6]			±0.2		
Response time (10 to 90 %)			1	5	ms
Power supply rejection	Offset		0.05		%FSO/V
	Span		0.05		
Power consumption (I_L = 20 mA)			260		mW

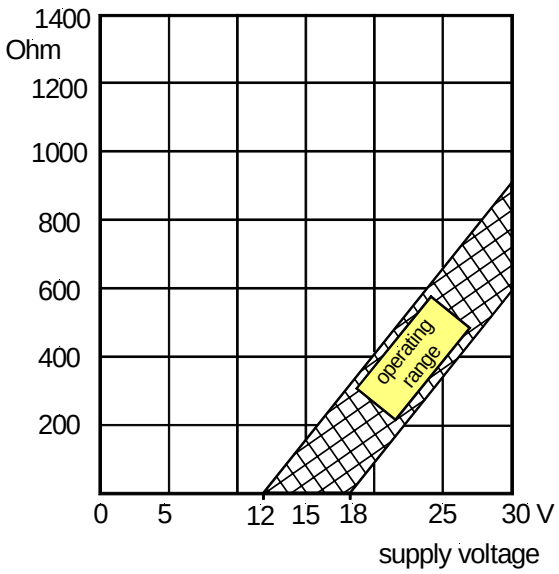
Specification notes (for all devices):

1. The package is an all-sealed housing. For proper function the gage port is vented to the atmosphere through the connecting cable. Thus the vent tube of the cable end must have access to the ambient pressure.
2. The minimum supply voltage is directly proportional to the load resistance seen by the transmitter. For more details see the load limitation diagram.
3. Proof pressure is the maximum pressure which may be applied without causing damage to the sensing element.
4. Thermal effects tested and guaranteed from 0°C to 70°C relative to 25°C. All specifications shown are relative to 25°C.
5. Non-linearity refers to the **B**est **S**traight **L**ine fit measured for offset, full scale span and 1/2 full scale span.
6. Long term stability is the change in output after one year or 1 million pressure cycles.
7. Span is the arithmetic difference in transmitter output signal measured at zero pressure and the maximum operating pressure.
8. Tests are in accordance with EN61000-6-2, April 99.
9. CE-labelling is in accordance with 89/336/EEC.
10. The pressure transmitters must not be used as safety accessories according to article 1, 2.1.3 of the directive 97/23/EC.
11. Other sealing materials are available on request.

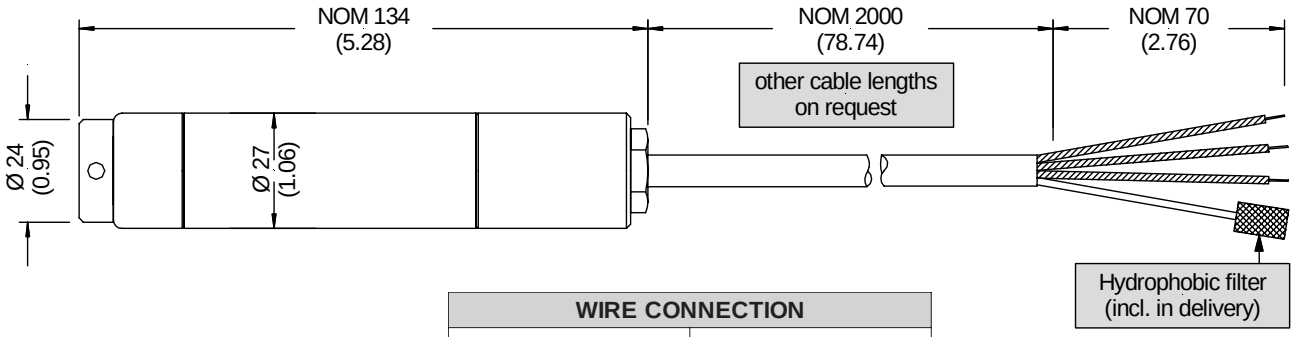
ELECTROMAGNETIC CAPABILITY[8]

	Test conditions	Criterion	Interference
Radiated, radio frequency electromagnetic field immunity (RFI)	EN61000-4-3: Grade 3 10 V/m, 80 MHz to 1000 MHz 80 % AMC (1 kHz)	A	<1 % FSO
Electrical fast transient / burst immunity (EFT)	EN61000-4-4: Grade 3 ±2 kV	B	<1 % FSO
Electrostatic discharge immunity test (ESD)	EN61000-4-2: Grade 4 ±8 kV, contact discharge	B	<1 % FSO
Immunity to conducted disturbances induced by radio-frequency fields	EN61000-4-6: Grade 3 0,15 to 80 MHz 10 V, 80 % AMC (1 kHz)	A	<1 % FSO

LOAD LIMITATION



OUTLINE DRAWING



WIRE CONNECTION	
Color	**Electrical connection**
red	+Vs
black	-Vs
transparent	vent tube[1]
bare	case/shield

mass: typ. 350 g (without cable)

dimensions in mm (inches)

ORDERING INFORMATION

KTx M 6xxx G 4 C x S

calibration
E: calibration in bar
U: calibration in psi

mbar-ranges

pressure range

250:	0...250 mbar	005:	0...5 psi
400:	0...400 mbar	010:	0...10 psi
600:	0...600 mbar	015:	0...15 psi
1K0:	0...1000 mbar	020:	0...20 psi
1K6:	0...1600 mbar	030:	0...30 psi
2K0:	0...2000 mbar	070:	0...70 psi
5K0:	0...5000 mbar		

submersible

cable length in m

cable version

output signal
4: 4...20 mA

pressure mode
G: gage pressure

Note: Other pressure ranges and options are widely available.
Please contact your nearest Sensortechnics sales representative.

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